.75 x 058

Work Order ID 101720

May-13-13 1:12:43 PM

101720

Item ID: D2973 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Cross Bolt Spacer

Start Date: 5/13/13 **Start Qty:** 24.00 *24* **Cust Item ID:**

Required Date: 5/31/13 **Req'd Qty:** 24.00 *24* **Customer:**

Reference:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** MLJ **Date:** 13-05-14 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D2973	Rev A								
100		0.00							
100						24	Ø		
Hardinge	**Memo**	0.00	FK 13/05/21						
Hardinge CNC Lathe Small	TURN AS PER DWG AND FOLIO FB096 DWG REV: A FOLIO REV: AA								
105	QC2- Inspect parts off machine FAI/FAIB	0.00							
105						24	Ø		
QC	**Memo**	0.00	FK 13/05/21						
Quality Control									
107	QC8- Inspect parts - second check	0.00	ok 13/05/21						
107						24	Ø		
QC	**Memo**	0.00							
Quality Control									

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐
- ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

_____

_____

_____

Work Order ID 101720

May-13-13 1:12:43 PM

101720

Item ID: D2973 **Accept** *N900040100* **Setup Start** *NS1*

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Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	Identify as per dwg & Stock Location: L6	0.00				24	0	BE	13/05/27
120									
Packaging	**Memo**	0.00							
Packaging	***STOCK IN SKIDTUBE CELL***								
130	QC21- Final Inspection - Work Order Release	0.00							13/5/27
130									
QC	**Memo**	0.00							
Quality Control									

13-05-27

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

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- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

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- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐
- ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

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- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

Picklist Print

May-13-13 1:12:42 PM

Work Order ID: 101720

Parent Item: D2973 **Start Date:** 5/13/13 **Required Date:** 5/31/13

Parent Item Name: Cross Bolt Spacer **Start Qty:** 24.00 **Required Qty:** 24.00

Comments: IPP A00.05.18New IssueEC IPP REV:B NOW ON HARDINGE 12.02.28
JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6T0.750W.058		Purchased	No			100	f	60.3170	**0.2896**	**7.3162104**			
6061-T6 RD Tube .750 x.058W													

Location	Loc Qty	Loc Code
MAT015	60.317	
10099	24	
112652	36.317	

7.32 ~~112652~~ FA 13/05/21

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

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- Supplier ☐
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- Other ☐
- ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

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- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

_____

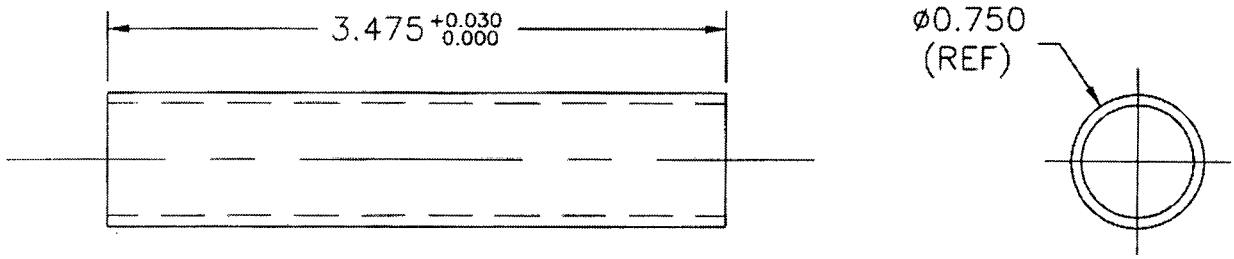
_____

_____

DESIGN	DRAWN BY	DART AEROSPACE USA, INC. BELLEVUE, WA	
RF	RF		
CHECKED	APPROVED	DRAWING NO. D2973	REV. A SHEET 1 OF 1
DATE 00.03.13		TITLE CROSS BOLT SPACER	SCALE 1:1
A	00.03.13	NEW ISSUE	

QA COPY ISSUED

RELEASED
00.05.11



MATERIAL: 6061-T6 (WW-T-700/6) 0.750 DIA. x 0.058 WALL
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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DART AEROSPACE LTD	Work Order:	101720
Description: Cross Bolt Spacer	Part Number:	D2973
Inspection Dwg: D2973 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
3.475	+0.030/-0.000	3.475	✓		FK-04	Vern.
Ø .750	+/- .010	.751	✓		"	"

Measured by:	FK	Audited by:	OK	Preliminary Approval:	
Date:	13/05/21	Date:	13/05/21	Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15